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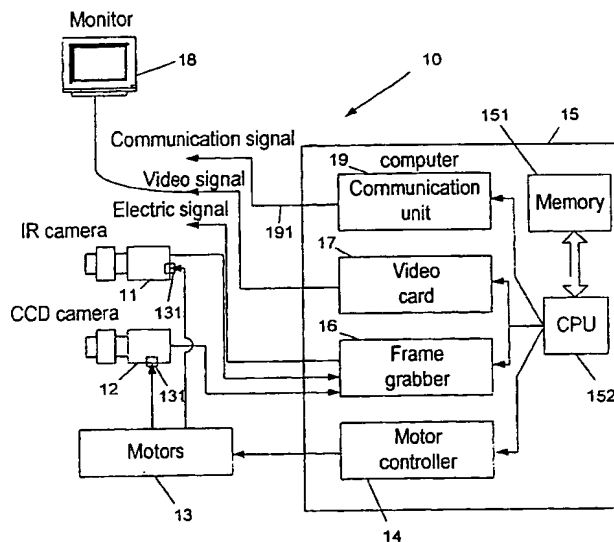
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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR IMPLEMENTING MULTIPURPOSE MONITORING SYSTEM



(57) Abstract: Method for the monitoring of an environment, by procuring, adjourning and storing in a memory, files representing the background space. Programs for processing data obtained from the observation of objects are defined and stored in a memory, for identifying the objects and for determining whether they are dangerous. Parameters, according to which the observation of the controlled space is effected, are determined and stored. Photographic observation of the controlled space or sections thereof, is performed according to the aforesaid observation parameters. The digital data representing these photographs are processed to determine whether possible dangerous objects have been detected, and if so, these objects are classified according to the stored danger parameters.



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No
IL 03/00585

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G08B13/196 G08B13/194

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G08B G08G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP 1 170 715 A (H A N D GMBH) 9 January 2002 (2002-01-09) paragraphs '0007!-'0012! column 3, line 18 - line 21 paragraph '0015! paragraph '0021! paragraph '0027! paragraph '0031! paragraph '0033!	1-3,5,7, 8,17,18, 28,29 4,6
P,X	US 6 512 537 B1 (INOUE SHUJI ET AL) 28 January 2003 (2003-01-28) the whole document	1
X	& JP 2000 059796 A (MATSUSHITA ELECTRIC IND CO LTD) 25 February 2000 (2000-02-25) --- -/-	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

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Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International Application No.
PCT/IL 03/00585

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 666 157 A (AVIV DAVID G) 9 September 1997 (1997-09-09) column 5, line 63 -column 6, line 44 ----	1
A	US 4 989 084 A (WETZEL DONALD C) 29 January 1991 (1991-01-29) the whole document ----	1-8
A	US 5 686 889 A (HILLIS DAVID B) 11 November 1997 (1997-11-11) the whole document ----	1,28,29
A	US 5 862 508 A (MIYATAKE TAKAFUMI ET AL) 19 January 1999 (1999-01-19) figure 20 ----	1-8
X	DE 197 09 799 A (BOSCH GMBH ROBERT) 17 September 1998 (1998-09-17) ----	1,17-19
Y	 the whole document ----	9-16, 20-26, 30-36
X	US 5 790 183 A (KERBYSON GERALD M) 4 August 1998 (1998-08-04) ----	1,28,29
Y	 column 1, line 19 - line 24 column 6, line 53 - line 56 column 9, line 11 -column 1031 column 11, line 43 - line 51 ----	9-16, 20-26, 30-35
Y	DE 198 09 210 A (SIEMENS AG) 16 September 1999 (1999-09-16) the whole document ----	36
A	DE 196 21 612 A (C VIS COMPUTER VISION UND AUTO) 11 December 1997 (1997-12-11) the whole document ----	1,9-26, 28,31-35
A	DE 41 13 992 A (MEISEL ANDREAS DIPL ING ;AMELING WALTER (DE); FOEHR RALPH DR ING () 5 November 1992 (1992-11-05) the whole document ----	1,9-26, 28,31-35
A	DE 100 49 366 A (IND TECHNIK IPS GMBH) 25 April 2002 (2002-04-25) the whole document -----	1,9-26, 28,31-35

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL 03/00585

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
1-26, 28-36
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-8 17, 18

Method for monitoring an environment wherein a predictive analysis of the path of suspect entities is undertaken (cf assessing the path and foreseeing the future path of objects)

1.1. Claims: 28,29

Apparatus for monitoring an environment comprising a particular type of camera technology

2. Claims: 1, 9-16, 19-26, 28, 30-36

Method for monitoring an environment, performing angle modifications (Claim 9) of the layout of the imager positioning, or observing from a plurality of imagers in a given relationship (claims 17-26) in order to perform a panoramic or 3-Dimensional analysis of said environment.

Apparatus including features allowing the positioning of the image devices in order to perform the above mentioned method.

3. Claims: 1, 27

Method for monitoring an environment documenting activities of wildlife.

Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

IL 03/00585

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1170715	A	09-01-2002	DE	10032433 A1	17-01-2002
			EP	1170715 A2	09-01-2002
US 6512537	B1	28-01-2003	JP	2000059796 A	25-02-2000
US 5666157	A	09-09-1997	WO	9742764 A1	13-11-1997
			IL	116647 A	12-03-1999
			US	6028626 A	22-02-2000
US 4989084	A	29-01-1991	CA	2023747 A1	25-05-1991
US 5686889	A	11-11-1997	NONE		
US 5862508	A	19-01-1999	JP	8221577 A	30-08-1996
			US	2002030739 A1	14-03-2002
			US	5721692 A	24-02-1998
DE 19709799	A	17-09-1998	DE	19709799 A1	17-09-1998
			WO	9840855 A1	17-09-1998
US 5790183	A	04-08-1998	NONE		
DE 19809210	A	16-09-1999	DE	19809210 A1	16-09-1999
DE 19621612	A	11-12-1997	DE	19621612 A1	11-12-1997
DE 4113992	A	05-11-1992	DE	4113992 A1	05-11-1992
DE 10049366	A	25-04-2002	DE	10049366 A1	25-04-2002